

**MEMORANDUM OF AGREEMENT
FOR MITIGATION OF ADVERSE EFFECTS**

TO HISTORIC PROPERTY: The Paseo Bridge (Bridge No. L07345) and possibly other historic properties

UNDERTAKING: The proposed reconstruction and widening of the corridor from Route 210 to north leg of downtown loop including the Paseo Bridge, Jackson and Clay Counties, Missouri Department of Transportation Job No. J4I1507

STATE: Missouri

AGENCY: Federal Highway Administration.

WHEREAS, the Missouri Department of Transportation (MoDOT) has determined that proposed project activities will have an adverse effect on the Paseo Bridge (No. L07345), a property eligible for inclusion in the National Register of Historic Places (Register) and may have an effect upon other properties in or eligible for inclusion in the Register, and has consulted with the Missouri State Historic Preservation Office (SHPO) [SHPO Project Number 009-CL-05] pursuant to the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been invited to participate in this Memorandum of Agreement (MOA); and

WHEREAS, the MoDOT has been invited to concur in this Memorandum of Agreement (MOA); and

WHEREAS, the full impacts of this project to cultural resources cannot be determined until the final design is completed,

NOW, THEREFORE, the FHWA, MoDOT and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

1. Prior to the commencement of any proposed project activities that will adversely affect the Paseo Bridge, the MoDOT will contact the National Park Service (NPS) to determine the level and kind of Historic American Engineering Record (HAER) documentation required for the Paseo Bridge. MoDOT will ensure that the recordation is completed, and is accepted in writing by the NPS prior to commencement of any project activities that will have an adverse effect on the Paseo Bridge and, archival copies of this documentation along with photographs will be provided to the SHPO and to the Kansas City Landmarks Commission.

2. If it is determined that the Paseo Bridge is to be removed and/or demolished, MoDOT will place notices in the following periodicals and/or web site to advertise for a responsible party who will agree to take possession and re-erect the bridge at a new location. The availability of the bridge will be advertised at least six months prior to the commencement of the proposed project activities affecting the historic bridge.

a. *MOinfo*

Missouri Local Transportation Resource Center.
www.umsr.edu/~mltrc
email: mltrc@umsr.edu
Jefferson City, Missouri 65102

b. *Preservation News*

National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, DC 20036
or
National Trust Web Site www.nationaltrust.org
Preservation on Line
Distressed Properties
For Sale: Properties at Risk,

c. at least two newspaper serving the local area.

3. If ownership of the bridge is transferred to another party, the transfer deed will include preservation covenants that require the new owner to re-erect, adaptively reuse, and maintain the bridge in accordance with the "Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings." The re-erection plan and specifications and the proposed maintenance program will be forwarded to FHWA for review and approval in consultation with the SHPO.

4. If no party is found to take possession of the existing bridge and re-erect it at a new location, the bridge may be removed, demolished, or abandoned.

5. The project corridor is generally paved or otherwise in current use and could not be examined for the presence of intact archaeological deposits. The project footprint following design shall be examined by professional archaeologists with a phased approach as specified in 36 CFR Section 800.4(b)(2) to first determine if any cultural deposits are present and then to gather appropriate information to evaluate the eligibility of those properties under the National Register criteria (36 CFR 63). For all eligible sites, an Archaeological Data Plan shall be developed in consultation with the SHPO and other consulting parties to mitigate adverse effects to historic properties that cannot be avoided. The Archaeological Data Plan will be consistent with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation (48 FR 190: 44734-44737). The SHPO and the FHWA

concurrent in principle with this course of action during a field inspection on December 1, 2004.

Discovery of additional historic resources during the execution of the MOA will be addressed in accordance with 36CFR 800.13.

6. An architectural survey has been conducted of the project area and the SHPO concurred with the recommendation that the project would have no impact on any eligible architectural resources. If the project limits are modified in such a way to impact and adversely affect any significant architectural resources then the MoDOT shall consult with the SHPO and other consulting parties to develop and execute a mitigation plan

7. Documentation and a brief report of the actions related to Stipulations 1, 2, 3, and 4, will be filed with FHWA and the SHPO within one year after the availability of the bridge is first publicly advertised. Documentation and a brief report of the actions related to Stipulations 5 and 6 will be filed with FHWA and the SHPO within one year after completion of any fieldwork.

8. After completion of the project, FHWA shall provide a written report regarding the actions taken to fulfill the terms of the agreement to all signatories.

9. Any party to this agreement may terminate it by providing thirty (30) days notice to the other party, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination, 36 CFR 800.6(c)(8).

10. Any party may request that the agreement be amended, whereupon the proposed changes shall be submitted to the other parties and the ACHP in accordance with 36 CFR 800.6(c)(7).

11. MoDOT is committed to involving the public in successfully developing and delivering the project as it moves through the design-build process. MoDOT's public involvement in design and construction project phases will work to accommodate project stakeholders concerned with historic preservation, if any, in order to capture and consider substantive concerns related to historic properties.

12. Failure to carry out the terms of the Agreement requires that the FHWA again request the ACHP comments in accordance with 36 CFR Part 800. If FHWA cannot carry out the terms of the Agreement, it will not take or sanction any action or make any irreversible commitment that would result in adverse effects with respect to the National Register or eligible properties covered by the Agreement, or would foreclose the ACHP's consideration of modifications or alternatives that could avoid or mitigate the adverse effects until the commenting process has been completed.

13. Execution of this Memorandum of Agreement by FHWA, MoDOT, and the Missouri SHPO and implementation of its terms constitutes evidence that FHWA has taken into

account the effects of the undertaking on historic properties and afforded the ACHP an opportunity to comment on the proposed FHWA I-29/35 Paseo Bridge Project in Jackson County and Clay County, Missouri.

14. This Agreement shall commence upon having been signed by FHWA and SHPO and shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless FHWA and SHPO agree in writing to an extension for carrying out its terms.

Signed:

Mary F. Ridgway 10/25/06
Federal Highway Administration Date

Mark C. Mills 10/30/06
Missouri State Historic Preservation Office Date

Concur:

Stephen D. Harvey 10-23-06
Missouri Department of Transportation Date

**INFORMATION TO ACCOMPANY THE
MEMORANDUM OF AGREEMENT REGARDING
THE
PASEO BRIDGE (NO. L07345) OVER THE MISSOURI RIVER AND
OTHER HISTORIC PROPERTIES
JACKSON COUNTY AND CLAY COUNTY, MISSOURI
MoDOT Project No. J4I1507**

I. Project Description

The Missouri Department of Transportation (MoDOT) Project No. J4I1507 proposes to reconstruct and widen Interstate 29/35 with new interchange configurations, bridges, including the bridge over the Missouri River, and roadways in Clay and Jackson Counties. The study corridor extends approximately 4.7 miles (7.6 kilometers), just north of Missouri Route 210/Armour Road in Clay County and continues south on I-29/35/US 71, to the northwest corner of the central business district (CBD) freeway loop in downtown Kansas City, Missouri. The project includes the north side of the CBD loop, designated as both I-35/70 and US 24/40.

The EIS document examines operational and capacity improvements for this section of I-29/35 and I-35/70 and evaluates whether to complete a major rehabilitation of the existing I-29/35 Paseo Bridge over the Missouri River and construct a new companion bridge, construct two new bridges or replace the existing Paseo Bridge with a single new structure. If the project causes the closure and removal of the Paseo Bridge, then this project will have an adverse effect on the Paseo Bridge, which is eligible for inclusion on the National Register of Historic Places.

Of the architectural properties recorded during the course of the survey, a total of eight are individually eligible for the National Register of Historic Places as well as three bridges. The only NRHP eligible property, landscape, district, structure, or bridge that would be adversely affected by the proposed action is the Paseo Bridge. The Paseo Bridge is eligible for the NRHP as per the SHPO's concurrence with MoDOT's recommendation on March 29, 2004. The bridge is eligible for listing in the National Register of Historic Places under Criterion C for engineering.

II. Previous Work

As per correspondence dated March 11, 2004, MoDOT formally submitted the Paseo Bridge to the SHPO, recommending that it was eligible for the NRHP. On March 29, 2004 SHPO concurred with MoDOT that the Paseo Bridge was eligible for listing on the National Register of Historic Places, under Criterion C, in the area of engineering. A standard MOA with stipulations for HAER level documentation, and possible advertisement for adaptive reuse, is being drafted for the Paseo Bridge and included with the Final EIS for the I-29/35 Paseo Bridge Improvement Project.

III. Description of the Historic Property

The Paseo Bridge, Bridge L07345, is a self-anchored suspension bridge designed by Howard, Needles, Tammen, and Bergendoff. It was built by several local construction firms between 1952-54 and opened August 13, 1954. The Paseo Bridge, a three-span suspension bridge, has four steel plate girder approach spans and is 1,832 feet in length (MoDOT 2004). Two steel towers anchored in concrete piers carry the main cable, which is anchored underground on the north and south shores. Each cable band consists of four twisted galvanized steel rope suspender cables connected to a stiffening truss. These suspender cables support the floor beams, stringers, and floor of the bridge roadbed.

When the bridge opened in 1954, a toll of 15-35 cents was collected to finance the construction bonds. During the late 1960s, I-29/35 was constructed and the bridge was incorporated into the interstate system. The convenience of the highway system added another link between Jackson and Clay Counties and promoted growth of the area. In 1972, the construction bonds were retired and the bridge tolls were discontinued. The next year the roadbed was resurfaced. Replacement of the expansion joints was completed in 1984 and the guardrails were finished in 1997. Extensive emergency repair work was completed in 2003. In 2005 additional rehabilitation work was undertaken; this rehabilitation was considered minor. Both emergency repair and the minor rehabilitation projects did require the Paseo Bridge to be closed to traffic during the work. The number of vehicles crossing the Missouri River daily on the Paseo Bridge is approximately 94,000 (MoDOT 2004).

IV. Adverse Effect on the Historic Property

This project will have an adverse effect on the Paseo Bridge, which has been determined NRHP eligible under Criterion C, for engineering. The project will constitute an “adverse effect” to the bridge as described in 36 CFR 800.3 (b)(1)(4) of the National Historic Preservation Act.

V. Alternative Courses of Action.

There are three alternative courses of action for this project. These include the no build, no action; the rehabilitation of the existing structure; and the replacement of the existing structure. Mitigation for the adverse effect to the bridge is historical and photographic documentation (Historic American Engineering Record), and possibly the advertisement of the bridge’s availability for adaptive reuse.

A. No Build, No Action

The no build, no action alternative consists of leaving the Paseo Bridge in its present condition with no improvements or modifications. This is not a viable option as the

current river crossing does not meet current FHWA and MoDOT design standards, and it is in need of improvement. The existing bridge superstructure has capacity for four twelve-foot lanes, two four-foot shoulders and two barrier curbs (56' roadway.) This roadway width cannot accommodate a twelve-foot auxiliary lane or the twelve-foot shoulders. The four-foot shoulders on the existing bridge make the bridge functionally obsolete since they do not match the twelve-foot shoulder width of the approach roadways. The existing bridge superstructure can not be widened in a cost effective manner.

B. Rehabilitation of the Paseo Bridge

Rehabilitation and continued use of the existing Paseo Bridge is an option. However, due to the suspension configuration of the main spans, the deck cannot be widened beyond the current width. Reuse of the existing Paseo Bridge would be for one-way southbound traffic as a new bridge also would be built downstream to handle the traffic moving in the northbound direction. Due to channel migration over time, the navigation channel is no longer between the main spans but between a main span and the south shore. The I-29/35 bridge over the Missouri River (Paseo Bridge L07345) is over 50 years of age. It has a sufficiency rating of just over 50, and will qualify for full federal bridge replacement funding. Maintenance problems have been a concern on this bridge. In January 2003, the bridge was closed for several weeks to replace a fractured hold-down linkage on the suspension system. Another bridge rehabilitation occurred in 2005 which required bridge closure for five months. This extended the bridge's service life 10 to 15 years. The major tasks completed were minor repairs to the bridge deck, repainting the bridge, replacing deteriorated steel, wrapping the cables and replacing the permanent lighting system. The decision to replace the bridge deck and other measures to extend the bridge's service life an additional 30 years were studied and compared to replacement options as part of the I-29/35 Paseo Bridge Improvement EIS.

An option to leave the existing bridge in place for an alternative, non-vehicular use while building a new bridge downstream to accommodate all vehicular traffic is not acceptable because the footprint has been kept as narrow as possible to avoid Section 4(f) properties, environmental justice issues, and hazardous waste sites, as well as commercial and industrial establishments.

C. Replacement of the Existing Structure

The replacement option is based on issues irrespective of bridge type. The plan requires the construction of a new bridge adjacent to and downstream of the existing Paseo Bridge, then the removal of the existing structure and the construction of a parallel twin structure, either at the location of the existing Paseo Bridge or downstream of the new bridge structure. Another Scenario replaces the existing bridge with a single large new bridge. Constraints affecting the bridge design features are identified in the Environmental Impact Statement, including the bridge alignment and navigational requirements. Based on the general span requirements of the crossing, a number of bridge types are feasible, including a suspension type structure, a tied arch bridge, or a

cable-stayed structure. The determination of new bridge type will be conducted in close coordination with the community's civic leadership and the public.

VI. Proposed Mitigation

1. Prior to the commencement of any proposed project activities, that will adversely affect the Paseo Bridge, the MoDOT will contact the National Park Service (NPS)) to determine the level and kind of Historic American Engineering Record (HAER) documentation required for the Paseo Bridge. MoDOT will ensure that the recordation is acceptable to the NPS in writing prior to commencement of any project activities that would have an adverse effect on the Paseo Bridge. In addition, archival copies of this documentation along with photographs will be provided to the SHPO and to the Kansas City Landmarks Commission.

2. If it is determined that the Paseo Bridge is to be removed and/or demolished, MoDOT will place notices in the following periodicals and/or web site to advertise for a responsible party who will agree to take possession and re-erect the bridge at a new location. The availability of the bridge will be advertised at least six months prior to the commencement of the proposed project activities affecting the historic bridge.

a. *MOinfo*

Missouri Local Transportation Resource Center.
www.umsr.edu/~mltrc
email: mltrc@umsr.edu
Jefferson City, Missouri 65102

b. *Preservation News*

National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, DC 20036
or
National Trust Web Site www.nationaltrust.org
Preservation on Line
Distressed Properties
For Sale: Properties at Risk,

c. at least two newspaper serving the local area.

3. A Phase I archaeological and archival survey of the study corridor determined that there are 23 locations where archaeological sites may be located (two of which will be impacted by the present project limits). The potential sites in the areas of archaeological interest are historic in nature and date from the mid 19th through the early 20th century and include residences, businesses, a railroad station, and a possible cemetery. Due to landscape modification, prehistoric sites are not anticipated to be found in the project corridor. The 23 areas of archaeological interest are paved or otherwise in current use and could not be examined for the presence of intact deposits. If any of these areas of

archaeological interest are to be impacted by the I-29/35 project then they shall be examined by professional archaeologists with a phased approach as specified in 36 CFR Section 800.4(b)(2) to first determine if any cultural deposits are present and then to gather appropriate information to evaluate the eligibility of those properties under the National Register criteria (36 CFR 63). For all eligible sites, an Archaeological Data Plan shall be developed in consultation with the SHPO and other consulting parties to mitigate adverse effects to historic properties that cannot be avoided. The Archaeological Data Plan will be consistent with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation (48 FR 190: 44734-44737). The SHPO and the FHWA concurred with this course of action during a field inspection on December 1, 2004. An architectural survey has been conducted of the project area and the SHPO concurred with the recommendation that the project would have no impact on any eligible architectural resources. If the project limits are modified in such a way to impact and adversely affect any significant architectural resources then the MoDOT shall in consultation with the SHPO and other consulting parties to develop and execute a mitigation plan.

Discovery of additional historic resources during the execution of the MOA will be dealt with in accordance with 36CFR 800.13.

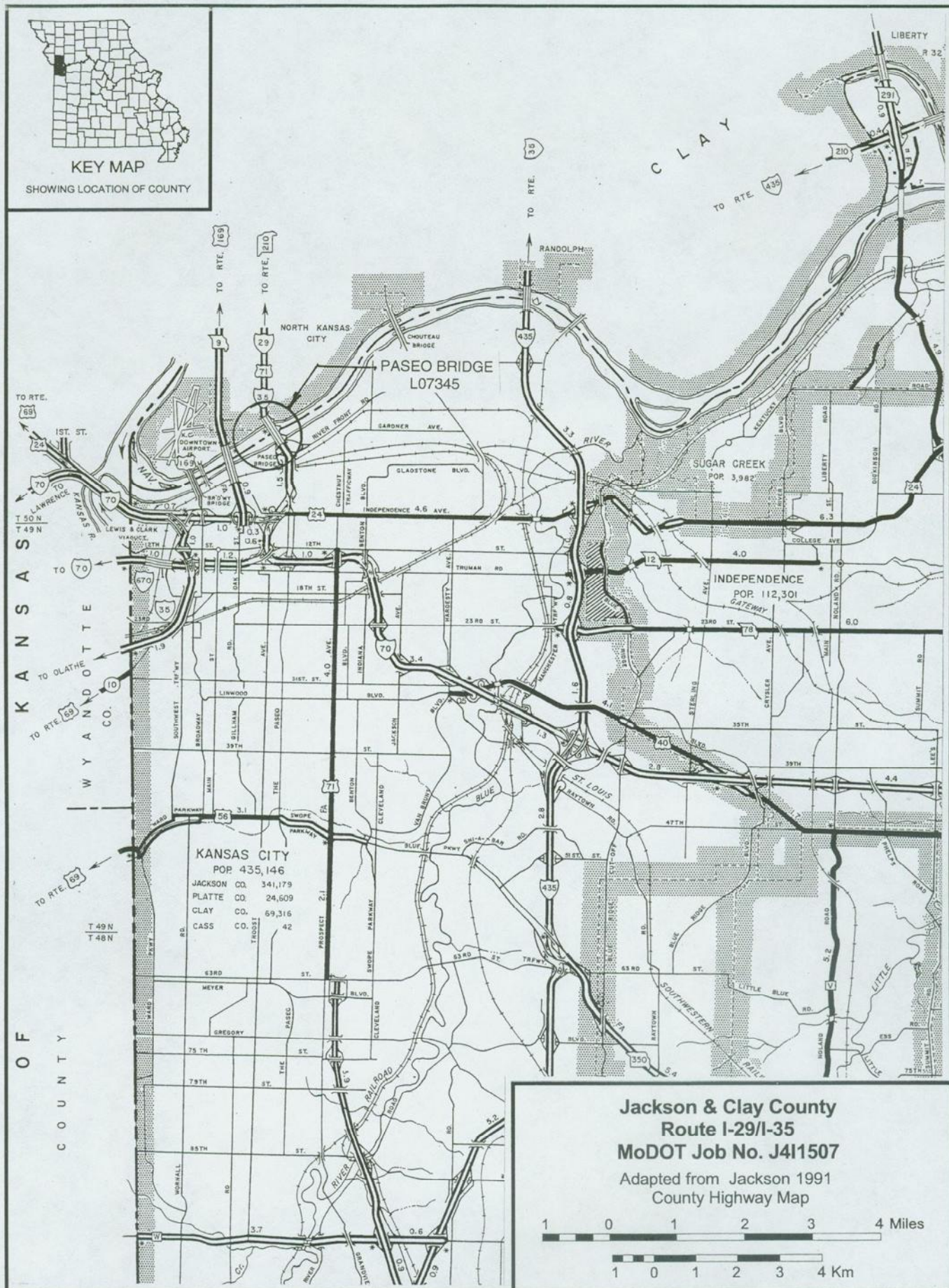
4. After completion of the project, FHWA shall provide a written report regarding the actions taken to fulfill the terms of the agreement to all signatories.

VII. List of Appendices

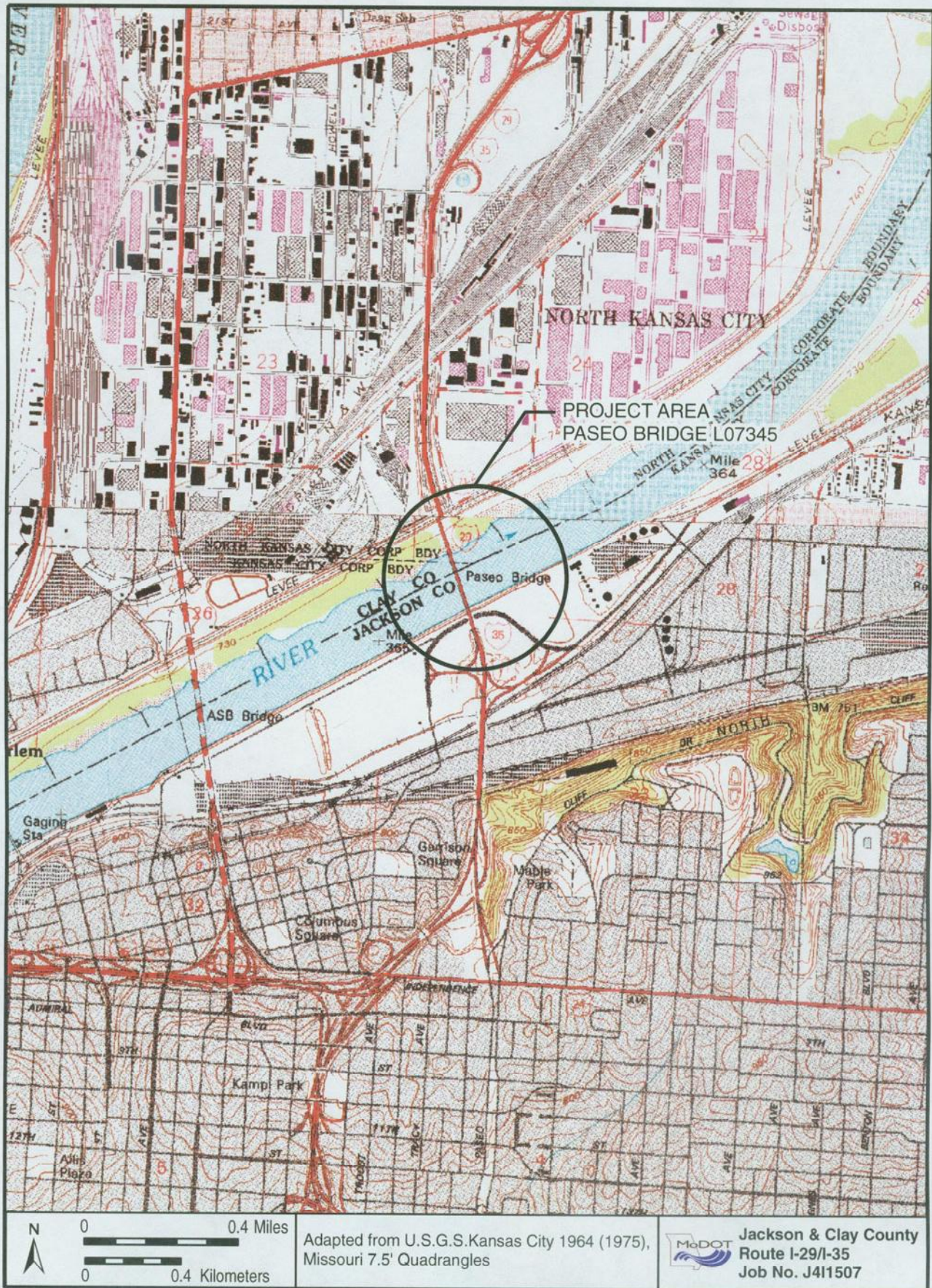
A. USGS Quadrangle Map, and County Highway Map showing the location of the Paseo Bridge (L07345).

B. Photographs of the Paseo Bridge (L07345)

C. Pertinent Correspondence



General Project Location (County Highway Map).



Location of project and cultural resources, U.S.G.S. topographic map.

L0734 08-30-05
Dk looking N



L0734 08-30-05
Profile looking N



Paseo Bridge Tower



Paseo Bridge Deck

**Paseo Bridge L07345
Self-anchoring Detail**



CS fill



Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

February 24, 2005

Dr. Robert Reeder
Missouri Department of Transportation
P.O. Box 270
Jefferson City, Missouri 65102

RE: Project No.: **009-CL-05**, Job No. J4I1507, Route I-29, Clay and Jackson Counties, Missouri (FHWA)

Dear Dr. Reeder:

Thank you for submitting information about the above-referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which require identification and evaluation of cultural resources.

After reviewing the Historical and Architectural Survey and Archaeological evaluation, we find it to be adequate, however, we did not receive appendix H (NRHP listed properties). In addition to the buildings already listed on the National Register, we concur that JA4, JA73, JA86, JA89, JA98A, JA107A, JA157, L734R1, and JAB27 are individually eligible for listing on the National Register of Historic Places. In addition, we concur that JA129, JA130, and JA131 are eligible for listing on the National Register of Historic Places as part of a historic district. Additionally, it is our opinion that bridge A4649/JAB24 is eligible for listing on the National Register of Historic Places because of the length of the through-arch truss bridge, the renown of the engineering firm, and the engineering involved in constructing a bridge over the Missouri River. In addition we concur that the remaining architectural resources and bridges addressed in the report are not eligible for listing on the National Register of Historic Places. In addition, we concur with the archaeological recommendations made in the report.

Additionally, in accordance with the Advisory Council on Historic Preservation's regulation Protection of Historic Properties (36 CFR Part 800), Section 800.5, we concur that the proposed project will have an **adverse effect**. If alignments are adjusted to take into consideration the



Dr. Robert Reeder Letter
February 24, 2005
Page 2

historic property, please submit additional information so that we may comment on any changes to the effect the project will have on the historic properties. If alignments can not be adjusted, we recommend the preparation of a Memorandum of Agreement (MOA) that outlines the steps needed to mitigate any adverse effect.

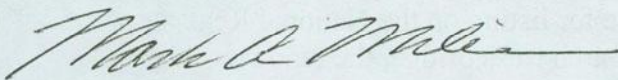
If the project continues to have an adverse effect on the historic resource, FHWA shall forward the necessary adequate documentation to the Executive Director, Advisory Council on Historic Preservation, the Old Post Office Building, 1100 Pennsylvania Avenue NW, #809, Washington, D.C 20004, in accordance with Section 800.6(a)(1). Pending receipt of the Council's decision on whether it will participate in consultation, no action shall be taken which would foreclose Council consideration of alternatives to avoid or satisfactorily mitigate any adverse effect on the property in question.

We look forward to reviewing any archaeological reports, the revised bridge information, and any additional project information.

If you have any questions please write Missouri Department of Natural Resources, State Historic Preservation Office, Attn: Review and Compliance, P.O. Box 176, Jefferson City, Missouri 65102, or call Alison Dubbert at (573) 751-7958. Please be sure to include the **SHPO Project Number (009-CL-05)** on all future correspondence relating to this project. If the information is provided via telephone call, please follow up in writing for our files.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE



Mark A. Miles
Director and Deputy State
Historic Preservation Officer

MAM:ad

c: Don Neumann
Jane Beetem
Toni Prawl



United States Department of the Interior

OFFICE OF THE SECRETARY

Washington, DC 20240

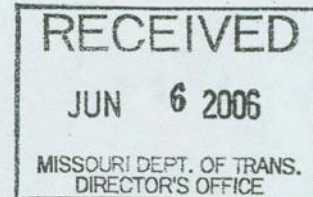
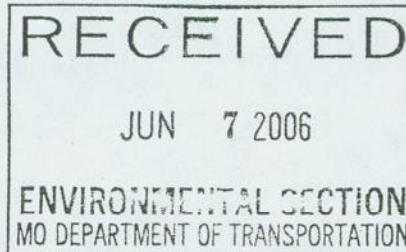
*Jackson/Clay - JAI150
Rte. I-29/I-35*



MAY 26 2006

ER 06/330

Mr. Allen Masuda
Division Administrator
Federal Highway Administration
209 Adams Street
Jefferson City, Missouri 65101



Dear Mr. Masuda:

As requested, the Department of the Interior (Department) has reviewed the draft Environmental Impact Statement (EIS) for **Reconstruction and Widening of Interstates 29/35 Paseo Bridge Corridor, Clay and Jackson Counties, Missouri**. The Federal Highway Administration (FHWA) and the Missouri Department of Transportation (MoDOT) prepared this document. The Department offers the following comments and recommendations for your consideration.

Section 4(f) Comments

The project proposes to reconstruct and widen Interstate 29/35 with new configurations of interchanges, roadways, and new bridges, including the bridge over the Missouri River in Clay and Jackson Counties. The MoDOT and the FHWA are proposing options for the existing I-29/35 Paseo Bridge over the Missouri River, including the construction of a new companion bridge or replace the existing bridge with an entirely new structure or structures. The evaluation considers a single historic property which has been determined eligible under Section 4(f) of the Department of Transportation Act of 1966 (48 U.S.C. 1653(f)). The Paseo Bridge over the Missouri River is a self-anchored suspension bridge designed by Howard, Needles, Tammen, and Bergendoff, and was built by several local construction firms between 1952 and 1954 and opened August 13, 1954. The MoDOT determined, and the Missouri State Historic Preservation Officer (SHPO) concurred, that the Paseo Bridge was eligible for listing in the National Register of Historic Places under Criterion C in the area of engineering.

The Department concurs with the use of the programmatic Section 4(f) Evaluation for historic bridges. The FHWA and the MoDOT have demonstrated through the draft Memorandum of Agreement with the SHPO that all possible measures to minimize harm to an eligible property have been considered. We would have no further comment on this project unless conditions change.



Environmental Impact Statement Comments

The document adequately summarizes the fish and wildlife resources in the urbanized project area. Because the vast majority of the project area is heavily disturbed, there are few remaining fish and wildlife resources to be affected. However, we recommend the final document include a section on bridge demolition, should it be required, to adequately describe and evaluate effects from those alternatives that might involve such demolition.

A number of Missouri River bridges are being replaced as they reach obsolescence. In the process of reviewing the increasing number of these bridge replacements, we have learned more about the potential impacts of removing these bridges on fish and wildlife. To minimize the effects of bridge removal on fish and wildlife resources, we recommend the actions described in the two paragraphs below be implemented in association with any project alternative that involves the removal of the existing bridge:

A number of migratory birds nest underneath bridges, including such species as barn swallow and cliff swallow. Removal of the bridge during the nesting season can result in death or injury to adult and young birds, eggs, and nests. Measures should be implemented to avoid and minimize the impact of bridge removal on nesting birds. If an alternative is selected that requires demolition of the existing structure, we recommend that a survey be conducted to determine if nesting migratory birds are present and, if so, schedule demolition activities outside the nesting season (April 15 – August 1) to the maximum extent possible.

Bridge demolition has a negative impact on aquatic resources, primarily fish. The greatest potential effects are due to removal of the existing bridge piers using explosives. The blast(s) can result in fish mortality in the vicinity of the blast. The final document should address potential aquatic impacts from bridge removal and identify measures to minimize those effects. To assist you in evaluating these impacts for the Paseo Bridge, we recommend that you review information on the aquatic impacts and mitigation measures from other recent bridge projects on the Missouri and Mississippi Rivers.

Specific Comment

Page IV-54, Section L.2 Groundwater Quality Impacts, first sentence.

The document states, "There are no public drinking wells or sole-source aquifers within the study corridor; therefore no effects to those types of groundwater supplies are anticipated." However, a public supply well is located as near as 1/2 mile from the study corridor centerline (page III-33, second full paragraph) in what is described as very permeable alluvium. In considering potential sources of contamination to the well, it is important to consider not just the location of the well itself, but the surrounding area from which the well draws its water -- its "contributing area" -- which could include the

study area. Therefore, the well could be more vulnerable to impacts from the highway, such as wash off of pollutants, than is implied in the draft EIS.

Endangered Species Act Comments

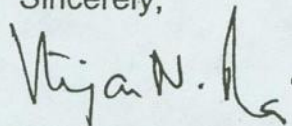
The document adequately describes federally listed species that may occur in the project area. Based on that information and the commitment to survey the corridor for nesting bald eagles immediately prior to construction, the Fish and Wildlife Service (FWS) concurs that the project is not likely to adversely affect the eagle.

The FWS has met with the MoDOT regarding project-related effects to the pallid sturgeon. During those conversations, the FWS recommended that surveys be conducted for pallid sturgeon immediately prior to and after, bridge demolition, should demolition be necessary. With continued pallid sturgeon research, there will likely be a number of fish (both pallid and shovelnose sturgeon) implanted with radio transmitters throughout the lower Missouri River. A sweep of the area prior to those activities could help identify whether any telemetered fish are in the area at that time. The presence of radio-tagged sturgeon could be helpful in evaluating the response of sturgeon to bridge demolition, if they could be monitored during removal activities. The draft EIS describes a number of potential alternatives for bridge alignment, number of spans, and possibly bank work along the northern embankment. As this information is refined, the FWS will continue to informally consult with the MoDOT regarding the project's impact on the pallid sturgeon.

The Department has a continuing interest in working with the FHWA and the MoDOT to ensure that impacts to resources of concern to the Department are adequately addressed. For matters related to Section 4(f) resources, please contact Regional Environmental Coordinator Nick Chevance, National Park Service, Midwest Regional Office, 601 Riverfront Drive, Omaha, Nebraska, 68102, telephone 402-661-1844. For matters related to fish and wildlife resources and threatened and endangered species, please continue to coordinate with the Field Supervisor, Ecological Services Field Office, U.S. Fish and Wildlife Service, 101 Park DeVillie Dr., Suite A, Columbia, Missouri 65203, telephone 573-234-2132. If you have any questions concerning public supply water wells, please contact Chief Lloyd Woosley, USGS Environmental Affairs Program, U.S. Geological Survey, Mail Stop 423, Reston, Virginia 20192, telephone 703-648-5028.

We appreciate the opportunity to provide these comments.

Sincerely,



Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

Mr. Allen Masuda

4

cc:

Ms. Peggy Casey
Environmental Projects Engineer
Federal Highway Administration
209 Adams Street
Jefferson City, Missouri 65101-3203

✓ Mr. Kevin Keith
Chief Engineer
Missouri Department of Transportation
P.O. Box 270
Jefferson City, Missouri 65102



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal sheet

June 27, 2006

11:01:53am

COUNTY : CLAY

BRIDGE NO. L0734 5

REVIEW STATUS : APPROVED

NBI STATUS :

P

RECORD TYPE : ROUTE CARRIED 'ON' STRUCT

RUN DATE : 3/23/2006

SUBMITTAL YEAR :

2005

GENERAL STRUCTURE INFORMATION

1	State	MISSOURI
2	District	04
3	County	CLAY
8	Federal ID No.	6674
27	Year Built	1954
106	Year Reconstructed	1984
42A	Type of Service On	HIGHWAY
21	Structure Maintenance	STATE HIGHWAY AGENCY
22	Structure Owner	STATE HIGHWAY AGENCY
33	Br. Median Code	CLOSED MED NON MNTABL BAR
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP
101	Parallel Struc Desg	NONE EXISTS
103	Temporary Structure	NOT TEMPORARY
112	NBIS Bridge Length	YES

ROUTE DESIGNATION INFORMATION

5A	Record Type	ROUTE CARRIED 'ON' STRUCT
5B	Route Signing Prefix	IS
5C	Designated Level of Service	MAINLINE
5D	Route Number	00029
5E	Directional Suffix	NOT APPLICABLE
7	Facility Carried	IS 29 S
12	Base Hwy. Network	YES
13A	LRS Inventory Route No.	0000005878
13B	Subroute No.	00
20	Toll Status	ON FREE ROAD
26	Functional Classification	11-UR PRNCPL ARTERIAL-IS
28A	Lanes on Structure	04
100	STRAHNET Designation	ON A DEFENSE HWY
104	National Highway System	ON NHS
105	Federal Lands Highway	NOT APPLICABLE
110	Designated Nat. Network	YES

STRUCTURE LOCATION INFORMATION

4	Place	AVONDALE CITY
	Code	02800
9	Location	S 23 T 50 N R 33 W
11	Milepoint	79.27 miles
16	Latitude	39 D 7 M 0 S
17	Longitude	94 D 33 M 54 S

STRUCTURE TRAFFIC INFORMATION

29	AADT	89775
30	AADT Year	2004
102	Direction of Traffic	2-WAY TRAFFIC
109	AADT Truck Percent	11%
114	Future AADT	161595
115	Future AADT Year	2026

UNDERRECORD INFORMATION

6	Features Intersected	MISSOURI RVR, CST LEVEE
42B	Type of Service Under	HIGHWAY-WATERWAY
28B	Lanes Under Structure	02
54A	Vert. Clearance Ref.	HIGHWAY
54B	Vert. Clearance	18 Ft. 2 In.
55A	Rt. Lat Clear Ref.	HIGHWAY
55B	Rt. Lat Clearance	7 Ft. 2 In.
56	Left Lat Clearance	0 Ft. 0 In.
38	Navigation Control	PERMIT REQ
39	Nav Vertical Clear	51 Ft. 9 In.
40	Nav Horizontal Clear	349 Ft. 7 In.
111	Nav. Pier Protection	NAVIGAT PROT NOT REQD
116	Nav. Cl. Vert. Clear	

STRUCTURE GEOMETRIC INFORMATION

10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
19	By pass Detour Length	0.39 miles
32	Approach Roadway Width	67 Ft. 10 In.
34	Skew	0.00 Degrees
35	Struct. Flared	NO
47	Total Horiz. Clear	25 Ft. 10 In.
48	Maximum Span Length	615 Ft. 11 In.
49	Structure Length	1,831 Ft. 0 In.
50A	Left Curb/Sidewalk Width	2 Ft. 11 In.
50B	Right Curb/Sidewalk Width	2 Ft. 11 In.
51	Curb to Curb Br. Width	51 Ft. 9 In.
52	Deck Width (Out-Out)	59 Ft. 4 In.
53	Vert. Clearance Over Deck	99 Ft. 99 In.



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal sheet

June 27, 2006
11:01:53am

COUNTY : CLAY BRIDGE NO. L0734 5 REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/23/2006 SUBMITTAL YEAR : 2005

LOAD RATING AND POSTING INFORMATION

31 Design Load HS 20
41 Structure Status P - POSTED FOR LOAD
63 Oper. Rating Meth. LOAD FACTOR
64 Operating Rating 58 Tons.
65 Inventory Rating Meth. LOAD FACTOR
66 Inventory Rating 34 Tons.
70 Bridge Posting Code =>LEGAL LOADS

PROPOSED IMPROVEMENT INFORMATION

Sufficiency Rating 55.9 Percent
Deficiency Rating NOT DEFICIENT
Funding Eligibility
75A Proposed Work
75B Work Done By
76 New Struc Length 0 Ft. 0 In.
94 Struc Improve Cost \$ 0,000
95 Roadway Improve Cost \$ 0,000
96 Total Project Cost \$ 0,000
97 Year of Cost Estimates 0

APPRAISAL RATING INFORMATION

36A Br. Rail App. Rating DOES NOT MEET ACCEPT STND
36B Transition Rail App. Rating MEETS ACCEPTBLE STND
36C Approach Rail App. Rating MEETS ACCEPTBLE STND
36D Rail End Treat. App. Rating MEETS ACCEPTBLE STND
67 Struc Eval App. Rating 5
68 Deck Geometry App. Rating 4
69 Underclearance App. Rating 4
71 Waterway Adeq. App. Rating 8
72 Approach Road App. Rating 8
113 Scour Assess App. Rating 5

APPROVED POSTING INFORMATION

Approved Posting Category S-C3
Ton1 Ton2 Ton3
Tonnage Values for Posting Sign 45
General Text for Posting Sign
WEIGHT LIMIT 45 TONS.

MATERIAL/CONSTRUCTION INFORMATION

43A Main Struc. Mat type STEEL CONTINUOUS
43B Main struc Constr. Type SUSPENSION
45 # of Main Spans 3
44A Appr Struc. Mat type STEEL CONTINUOUS
44B Appr Struc. Cnstr. type GIRDER & FLOORBEAM SYSTEM
46 # of Approach Spans 4
107 Deck Mat/Constr. 1 CONCRETE CIP
108A Wear Surf Mat/Constr. 6 BITUMINOUS
108B Membrane Mat/Constr. 1 BUILT UP
108C Deck Protect Mat/Constr. 0 NONE

CONDITION RATING INFORMATION

58 Deck Cond. Rating 6
59 Superstructure Cond. Rating 5
60 Substructure Cond. Rating 6
61 Channel /Channel Protection Cond. Rating 7
62 Culvert Cond. Rating N

INSPECTION INFORMATION

90 Gen. Insp Date 12 / 05
91 Gen. Insp. Frequency 24 Months
92A Frac. Critical Insp. Date Y Months 24
93A Frac. Critical Insp. Date 8 / 05
92B Underwater Inspection Y Months 60
93B Underwater Insp. Date 7 / 05
92C Special Inspection Y Months 24
93C Special Inspection Date 8 / 05

BORDER BRIDGE INFORMATION

98 Neighboring State Code
98B Neighboring State % Respon
99 Neighboring State Struc. No.

FIELD POSTING INFORMATION

Field Posting Category S-C3
Ton1 Ton2 Ton3
Tonnage Values for Posting Sign 45
General Text for Posting Sign
WEIGHT LIMIT 45 TONS.